Operating Instructions and Parts Manual
15-inch Vari-Speed Drill Press
Models: J-A3816, J-A5816, J- A5818



Model J-A3816



Model J-A5816

For models with serial no. 11110696 and higher

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Part No. M-354500
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Warranty and Service

JET, Wilton and Powermatic warrants every product they sell against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period
The general warranty lasts for the time period specified in the literature included with your product or on the official JET, Wilton or Powermatic branded websites.

- JET, Wilton and Powermatic products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

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This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered
This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance.

Warranty Limitations
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More Information
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90 Days – Parts; Consumable items; Light-Duty Air Tools
1 Year – Motors; Machine Accessories; Heavy-Duty Air Tools; Pro-Duty Air Tools
2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories
5 Year – Woodworking Machinery
Limited Lifetime – Wilton branded products; JET Parallel clamps; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools

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The specifications in this manual are given as general information and are not binding. Walter Meier (Manufacturing), Inc., reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fittings, and accessory equipment deemed necessary for any reason whatsoever.

⚠ Warnings

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace warning labels if they become obscured or removed.
4. This drill press is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a drill press, do not use until proper training and knowledge have been obtained.
5. Do not use this drill press for other than its intended use. If used for other purposes, Walter Meier (Manufacturing), Inc., disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
6. Keep guards in place and in working order when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately.
7. Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
8. Keep work area clean. Cluttered areas and benches invite accidents.
9. Do not use in dangerous environment. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
10. Keep children away. All visitors should be kept safe distance from work area.
11. Make workshop kid proof with padlocks, master switches, or by removing starter keys.
12. Don't force tool. It will do the job better and safer at the rate for which it was designed.
13. Use the right tool. Don’t force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely at the rate for which it was designed.
14. Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
15. Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
16. Always use safety glasses. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
17. Secure work. Make sure the work piece is securely attached or clamped to the table. Never use your hand to hold the work piece.
18. Don't overreach. Keep proper footing and balance at all times.
19. Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
20. Disconnect tools before servicing; when changing accessories, such as blades, bits, cutters, and the like.
21. Reduce the risk of unintentional starting. Make sure switch is in off position before plugging in.
22. Use recommended accessories. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
23. Never stand on tool. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.

⚠ Warnings

24. Check for damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation.
25. A guard or other part that is damaged should be properly repaired or replaced.
26. Do not leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.
27. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

    - Lead from lead based paint.
    - Crystalline silica from bricks, cement and other masonry products.
    - Arsenic and chromium from chemically treated lumber.

    Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.
28. Make certain the switch is in the OFF position before connecting the machine to the power supply.
29. Make certain the machine is properly grounded.
30. Give your work undivided attention. Looking around, carrying on a conversation and “horse-play” are careless acts that can result in serious injury.
31. The operator should not wear gloves when operating the machine.
32. All doors should be closed, all panels replaced and other safety guards should be in place prior to the machine being started or operated.
33. Be sure the drill bit is not in contact with the work piece when the motor is started. The motor should be started and up to full speed before bringing the drill bit into contact with the work piece.
34. Keep your hands away from the drilling area.
35. The drill press must be stopped and the electrical supply must be cut off before any drill bit replacement or machine adjustment is done, or before any attempt is made to change the drive belts or before any periodic service or maintenance is performed on the drill press.
36. Remove loose items and unnecessary work pieces from the area before starting the machine.
37. The work piece must be securely clamped before the drill bit comes in contact with the work piece.
38. The drill press must be stopped and the electrical supply cut off or machine unplugged before reaching into the drilling area.
39. Wear eye protection.
40. Do not remove jammed pieces until motor has stopped.
41. Hold workpiece firmly against table.

Safety Instructions for Drill Presses

1. All work shall be secured using either clamps or a vise to the drill press table. It is unsafe to use your hands to hold any workpiece being drilled.
2. Drill press head and table shall be securely locked to the column before operating the drill press. This must always be checked prior to starting the machine.
3. Always use the correct tooling. Tooling shall always be maintained and properly sharpened. All tooling must be run at the proper speeds and feeds as they apply to the job. Use only recommended accessories and follow those manufacturer's instructions pertaining to them. Tooling shall be not be forced in to any workpiece but fed according to the proper specifications. Failure to follow these instructions will not only ruin the tooling as well as the machine, but can cause serious injury.
4. Never brush away any chips while the machine is in operation. All clean up should be done when the machine is stopped.
5. Keep hands in sight. Do not put hands or fingers around, on, or below any rotating cutting tools. Leather safety gloves should be used when handling any sharp objects or cutting tools. See Figure A.
6. Always wear protective eye wear when operating, servicing or adjusting machinery. Eyewear shall be impact resistant, protective safety glasses with side shields complying with ANSI Z87.1 specifications. Use of the eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from breakage of eye protection. See Figure B.
7. When drilling in material which causes dust, a dust mask shall be worn.
8. Avoid contact with coolant, especially guarding the eyes.
9. Non-slip footwear and safety shoes are recommended. See Figure C.
10. Wear ear protectors (plugs or muffs) during extended periods of operation. See Figure D.


A


B


C


D

ON/OFF Switch Padlock

For Model Numbers A5816 and A5818

To avoid accidental starting by young children or others not qualified to use the tool, the use of a padlock is required.

1. Open the padlock (Fig E).
2. Insert the through hole in the switch cover.
3. Close the padlock (Fig F).
4. Place the key in a safe place.


Figure E


Figure F

Specifications



The JET 15-Inch Vari-Speed Drill Presses, Models J-A3816, J-A5816, and J-A5818 provide drilling speeds from 400 to 5,000 rpm. Simple handwheel adjustment sets the speeds with an LED speed display on the faceplate of the machine.

JET's 15-inch vari-speed drill press provides a solid base for drilling and offers a wide range of spindle speeds. The large quill provides greater accuracy. The large worktable provides the operator with room to work and ample support for the workpiece. The drill press has a 3-inch diameter column for head and table support. The 15-Inch Vari-Speed Drill Press is equipped with a standard table raiser.

Model	**J-A3816**	**J-A5816**	**J-A5818**
Stock Number	354500	354550	354551
Type	Floor Model	Floor Model	Floor Model
Motor:			
Motor Speed (rpm)	1,725 rpm	1,725 rpm	1,725 rpm
HP	1 HP	1 HP	1 HP
Power Rating	1 PH, 115/220V Prewired 115V	1 PH, 115/220V Prewired 115V	3 PH, 220/440V Prewired 220V
Spindle speeds (rpm)	400 to 5,000rpm	400 to 5,000 rpm	400 to 5,000 rpm
Capacities:			
Cast iron	up to 5/8-in.	up to 5/8-in.	up to 5/8-in
Steel	up to 1/2-in.	up to 1/2-in.	up to 1/2-in.
Work Table Weight Cpcty	90 lbs.	90 lbs.	90 lbs.
Drills to center	15 in.	15 in.	15 in.
Quill diameter	2-1/4 in.	2-1/4 in.	2-1/4 in
Quill travel	6 in.	6 in.	6 in.
Spindle taper	#2 Morse Taper	#2 Morse Taper	#2 Morse Taper
Dimensions:			
Table (overall)	15-1/4 x 17-3/4 in.	15-1/4 x 17-3/4 in.	15-1/4 x 17-3/4 in.
Table (working area)	11-1/4 x 14-1/2 in.	12-1/2 x 14-1/2 in.	12-1/2 x 14-1/2 in.
Table travel	16-3/4 in.	16-3/4 in.	16-3/4 in.
Table T-slots	two at 1/2 in.	two at 1/2 in.	two at 1/2 in.
T-slot centers	5-5/16 in.	5-5/16 in.	5-5/16 in.
Spindle to table	25-3/4 in.	25-3/4 in.	25-3/4 in.
Spindle to base	44-1/2 in.	44-1/2 in.	44-1/2 in.
Column diameter	3 in.	3 in.	3 in.
Base (LxWxH)	20-7/8x14-3/16x3-1/8 in.	20-7/8x14-3/16x3-1/8 in.	20-7/8x14-3/16x3-1/8 in.
Base T-slots	two at 1/2 in.	two at 1/2 in.	two at 1/2 in.
Overall height	67-1/2 in.	67-1/2 in.	67-1/2 in.
Net weight	394 lb	426 lb	426 lb

Introduction

This manual includes operating and maintenance instructions for the JET 15-Inch Vari-Speed Drill Presses, Models J-A3816, J-A5816, and J-A5818. This manual also includes parts listings and illustrations of replaceable parts.

Refer to Figure 1 for key features of the drill press.

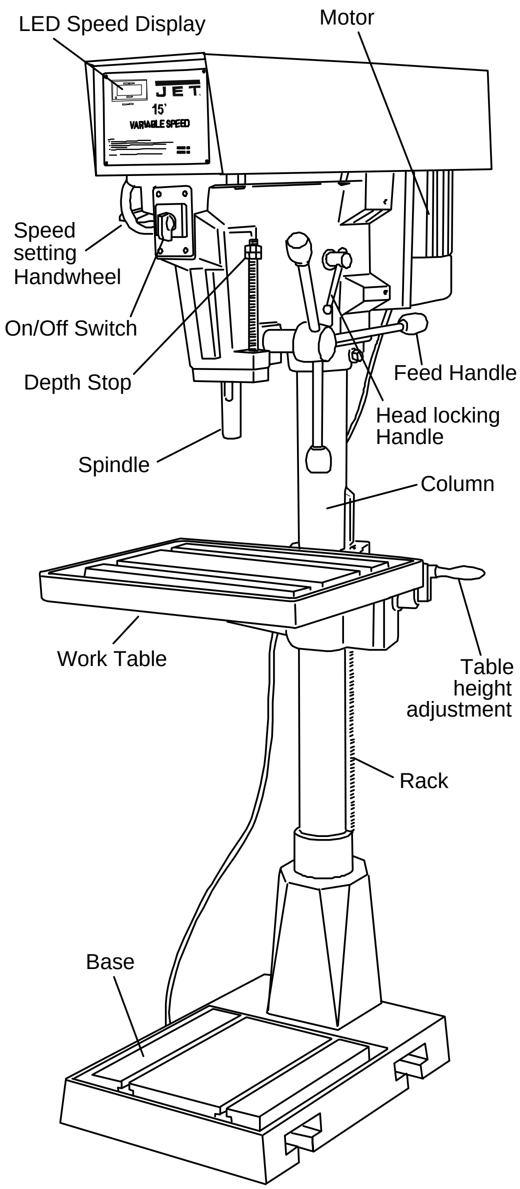


Figure 1 – Drill Press Features

Set-up and Assembly

Securing the Base

The base of the drill press has four mounting holes. The drill press should be level and rest solidly on the floor. Place shims under the four mounting holes in the base as required to level the drill press.

Assembly

The Drill Press is shipped with the head in lowered position. Follow these instructions to assemble.

1. *Figure 2:* Loosen locking handle on head and raise the head toward the top of the column. ***NOTE: Use an assistant to help raise the head.*** Re-tighten locking handle to secure head in position.

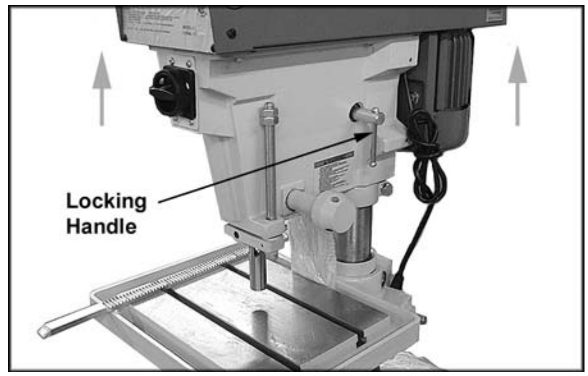


Figure 2

2. *Figure 3:* Use a wrench to loosen the hex screw on the head collar, and raise the head collar until it is contacting the head. Firmly tighten the screw on the head collar.
3. *Figure 3:* Loosen the set screw on the rack ring and raise rack ring to allow clearance for the rack. Re-tighten the set screw.

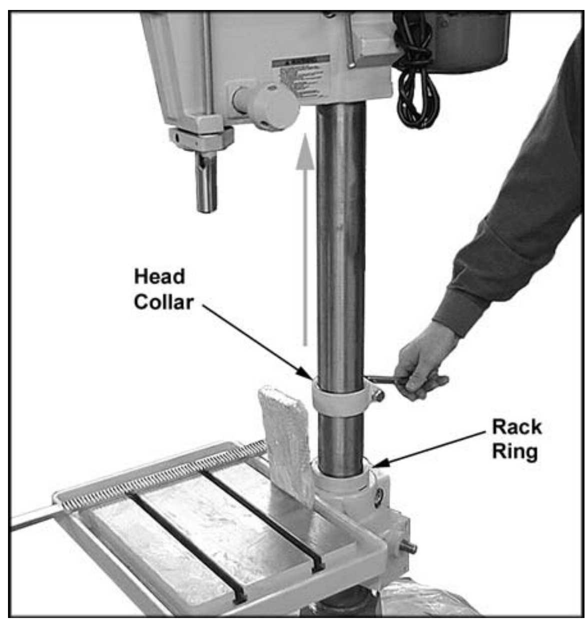


Figure 3

4. *Figure 4*: Loosen (do not remove) the four screws in the worm gear housing.

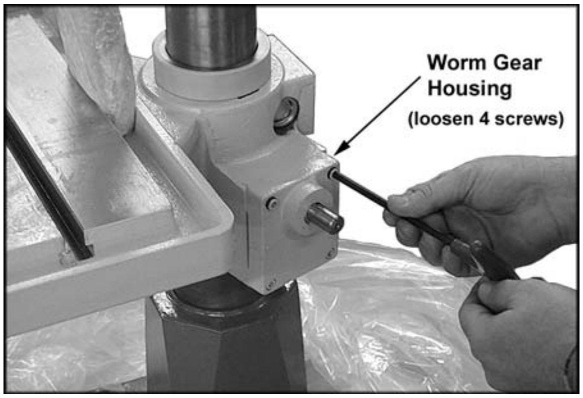


Figure 4

5. *Figure 5:* Place the rack against the column and slide it down as far as it will go into the slot in the table bracket. (Position the rack with the longer flat area toward the top and the short flat area toward the bottom.)
6. *Figure 5:* Slide the rack ring down onto the top of the rack and tighten the set screw on the rack ring.

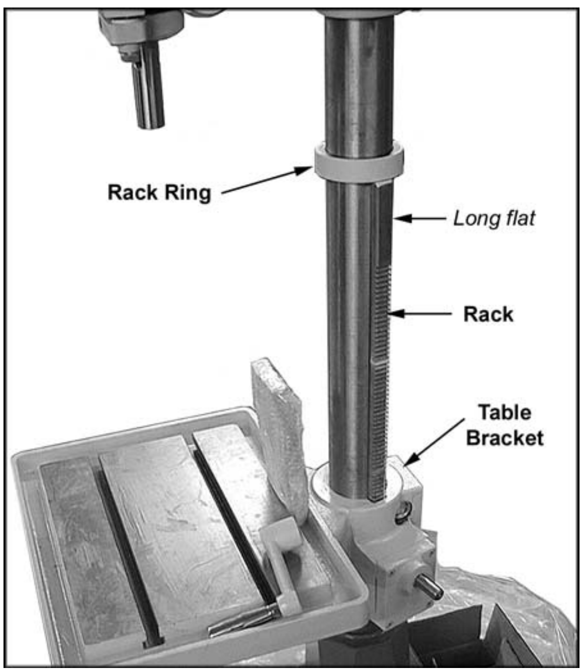


Figure 5

7. Tighten the four screws in the worm gear housing *(shown in Figure 4)*.
8. *Figure 6:* Install the table raising handle and tighten its set screw. Rotate the handle to move the table up and down the column, checking that movement is smooth and rack has been correctly installed.

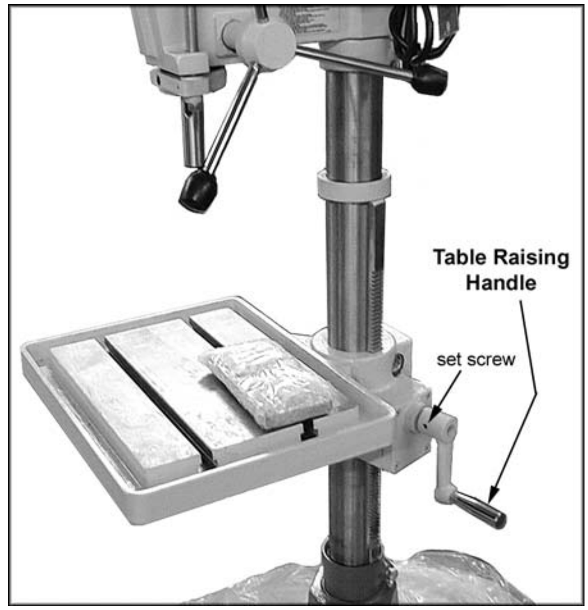


Figure 6

Cleaning

Clean off any protective grease with solvent. After cleaning, lubricate the base, table, and column with a light coating of medium weight machine oil. Repeat at six months intervals.

Internal parts of the drill press are lubricated at the factory. No further lubrication is required at the time of installation.

Electrical Connection

Refer to the Wiring Diagram section for wiring information. Connection to electrical power should be made by a qualified electrician. Observe local electrical codes when connecting the machine.

The motor should be protected with a time delay fuse or circuit breaker with an amperage rating slightly higher than the full load current of the motor.

Operating Controls

(Refer to Figure 7)

ON/OFF Switch

The ON/OFF switch is located at the front of the drill head.

Speed Control Handwheel

⚠CAUTION **To avoid damage to the speed adjustment mechanism, the motor must be oper-ating before attempting to adjust the speed rate.**

The speed control handwheel is located on the left side of the drill head. An LED speed indicator is provided on the face plate on the drill head.

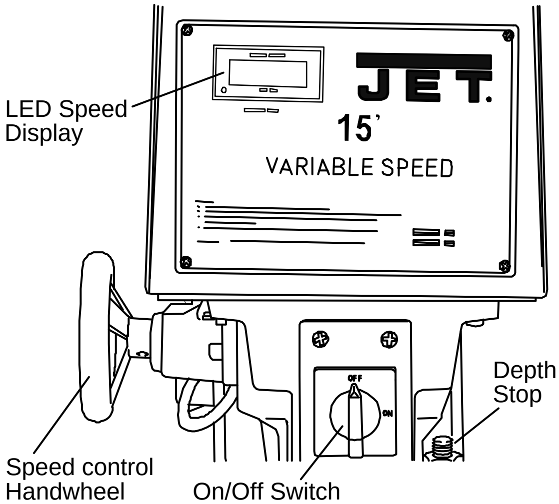


Figure 7 – Operating Controls

Depth Stop

A drilling depth stop (refer to Figure 8) is provided on the right side of the drill head. The depth stop consists of a threaded rod with depth setting jam nuts. The front side of the threaded rod has a depth scale. The jam nuts are loosened and moved to the desired depth on the scale. The upper jam nut is then tightened against the lower nut.

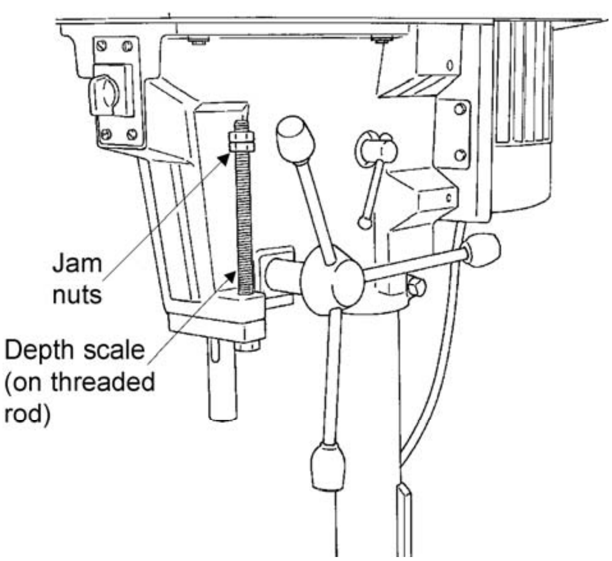


Figure 8 – Depth Stop

Operating Precautions

The following operating and safety precautions must be observed in order to avoid harm to the operator or damage to the drill press.

1. The head assembly must be locked to the column so the thrust produced by drilling will not force the head assembly up the column.
2. The work table must be locked to the column so it will not be forced down the column.
3. Be sure the belt is tightened to the proper tension.
4. **DO NOT** start to drill the workpiece until making certain the workpiece is held down securely.
5. **BEFORE** turning the speed control handwheel in either direction.
6. Point of operation protection is required for maximum safety. This remains the responsibility of the user/purchaser since conditions differ between jobs.
7. Make sure the drill is secured in the spindle or check before attempting to use the drill press.
8. Make sure the spindle taper is clean and free of burrs, scoring, and galling to assure maximum gripping.

Drilling Recommendations

Speeds for Drilling

The speed of a drill is usually measured in terms of the rate at which the outer periphery of the tool moves in relation to the work being drilled. The common term for this is Surface Feet per Minute (SFM). The relationship of SFM is expressed in the following formulas:

$$SFM = 0.26 \times RPM \times Drill\ Diameter\ (in\ Inches)$$

$$RPM = 3.8 \times \frac{SFM}{Drill\ Diameter\ (in\ Inches)}$$

In general, the higher the speed the shorter the drill life. Operating at the low end of the speed range for a particular material will result in longer life. The most efficient speed for operating a drill depends on many variables:

1. Composition and hardness of material.
2. Depth of the hole.
3. Efficiency of the cutting fluid.
4. Type and condition of the drilling machine.
5. Desired quality of the hole.
6. Difficulty of set-up.

Indication of Extreme Speeds and Feeds

A drill that splits up the web is evidence of too much feed or insufficient tip clearance at the center as a result of improper grinding. The rapid wearing away of the extreme outer corners of the cutting edges indicates that the speed is too high. A drill chipping or breaking out at the cutting edges indicates that either the feed is too heavy or the drill has been ground with too much tip clearance.

Speeds for High Speed Steel Drills

Material	Speed In SFM
Alloy Steel — 300 to 400 Brinell	20 - 30
Stainless Steel	30 - 40
Automotive Steel Forgings	40 - 50
Tool Steel, 1.2C	50 - 60
Steel, .4C to .5C	70 - 80
Mild Machinery Steel, .2C to .3C	80 - 110
Hard Chilled Cast Iron	30 - 40
Medium Hard Cast Iron	70 - 100
Soft Cast Iron	100 – 150
Malleable Iron	80 – 90
High Nickel Steel or Monel	40 – 50
High Tensile Bronze	70 -150
Ordinary Brass and Bronze	200 - 300
Aluminum and its Alloys	200 - 300
Magnesium and its Alloys	250 - 400
Slate, Marble, and Stone	15 -25
Plastics and similar material (Bakelite)	100 - 150
Wood	300 -400
Titanium Alloys	10 - 25
Titanium Alloy Sheet	50 - 60

General Applications

5mm hole	550 - 600
10mm hole	250 - 300
15mm hole	100 - 110

In cases where carbon steel drills are applicable, the drill should be run at speeds of from 40 to 50 percent of those given above.

Maintenance

Replacement of Drive Belt

⚠WARNING Make sure to disconnect elec-trical power to the drill press to avoid the possibility of inadvertent operation and expo-sure to potentially lethal voltage levels.

1. Start drill press. Set speed control to highest speed. Stop drill press.
2. Disconnect electrical power to drill press.
3. Remove head cover.
4. Remove belt. (With speed control setting at the highest speed, the belt should be loose enough to remove.)
5. Install the replacement belt. Install the head cover.
6. Connect electrical power to the drill press.
7. Operate the drill press to verify correct operation.

Replacement of Motor

⚠WARNING Make sure to disconnect elec-trical power to the drill press to avoid the possibility of inadvertent operation and expo-sure to potentially lethal voltage levels.

1. Disconnect electrical power to drill press.
2. Remove drive belt (see *Replacement of Drive Belt*).
3. Disconnect electrical wiring from motor junction box.
4. Remove nuts and washers from bolts securing motor to drill head. Remove motor.
5. Remove pulleys and related components from motor shaft.
6. Install pulleys and related components on replacement motor shaft.
7. Install motor on mounting bolts and secure with nuts and washers.
8. Connect electrical wiring (refer to *Wiring Diagram* section for wiring details).
9. Install drive belt (see *Replacement of Drive Belt*).
10. Operate drill press to verify proper operation.

Lubrication

Following are lubrication recommendations for drill press components.

- ❑ Spindle pulley drive: Lubricate spindle splines occasionally with light grease.
- ❑ Quill, Table, and Column: Lubricate with light film of oil.
- ❑ Table lift rack: Lubricate regularly with SAE20 oil (clean rack with solvent before applying oil.)
- ❑ Variable speed drive fork: Lubricate contact points occasionally with grease.

Adjustments

Table Adjustment

The table can be raised or lowered to accommodate the height of the component being drilled (refer to Figure 9). To raise or lower the table, loosen the lock handle. Then use the hand crank to move the table to the desired height. Then retighten the lock handle.

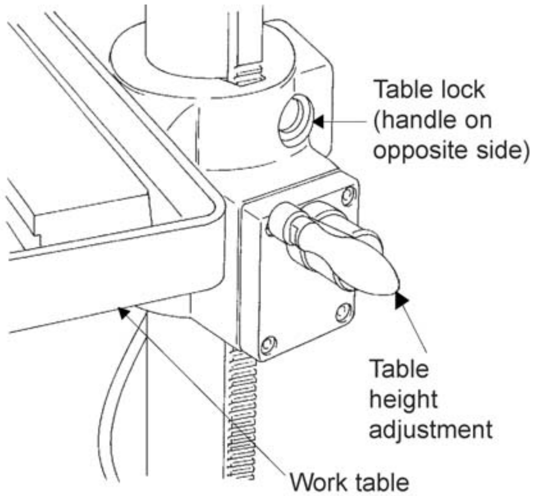


Figure 9 – Table Adjustment

Head Adjustment

⚠WARNING Change the radial position of the drill head only if the drill press base is secured to the floor. Swinging the drill head without the base being secured to the floor will cause the drill press to become unstable and tip over resulting in injury and/or damage to the machine.

The radial position of the drill head can be changed to accommodate the drilling of a hole that may be offset from the center of the table. Reposition the drill head by loosening the locking handles and swinging the drill head to the desired position. Then retighten the locking handles.

Wiring Diagrams

Refer to Figure 5 for wiring information. The drive motor is115/230 volt single phase or 220/440 volt three phase. **Notice:** When converting machine voltage, it is necessary to re-wire the LED display connection accordingly. Refer to figure 10.

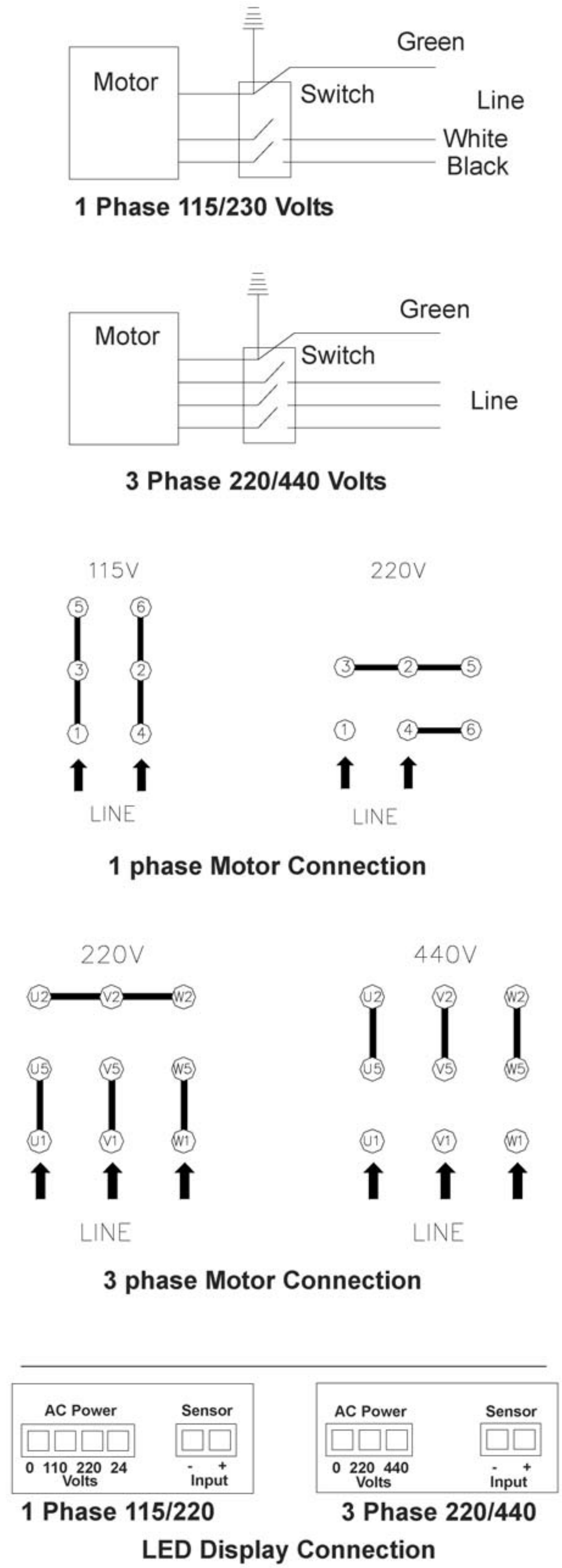


Figure 10

Electrical

115 Volt Operation

Referring to Figure 11:

As received from the factory, your drill press is ready to run at 115-volt operation. This drill press, when wired for 115 volt, is intended for use on a circuit that has an outlet and a plug that looks like the one illustrated in (A). A temporary adapter, which looks like the adapter shown in (B), may be used to connect this plug to a two-pole receptacle if a properly grounded outlet is not available. The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, or tab, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box.

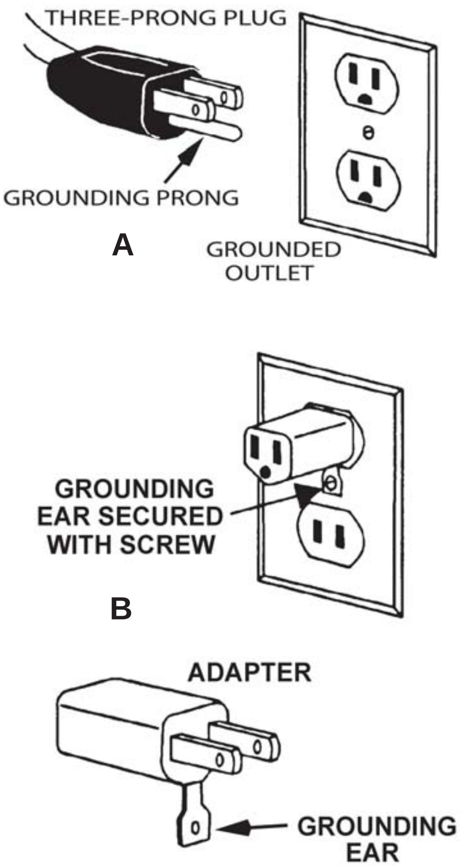


Figure 11

230 Volt Operation

Referring to Figure 12:

If 230V, single-phase operation is desired, the following instructions must be followed:

1. Disconnect the machine from the power source.
2. The JET drill press motor has four numbered leads that are factory connected for 115V operation, as shown in (A). For 230V operation reconnect the leads as shown in (B).
3. The 115V attachment plug (C), supplied with the drill press, must be replaced with a UL listed plug suitable for 230V operation (D). Contact your local Authorized JET Service Center or qualified electrician for proper procedures to install the plug. The drill press must comply with all local and national codes after the 230-volt plug is installed.
4. The drill press with a 230-volt plug should only be connected to an outlet having the same configuration as shown in (D). No adapter is available nor should be used with the 230-volt plug.

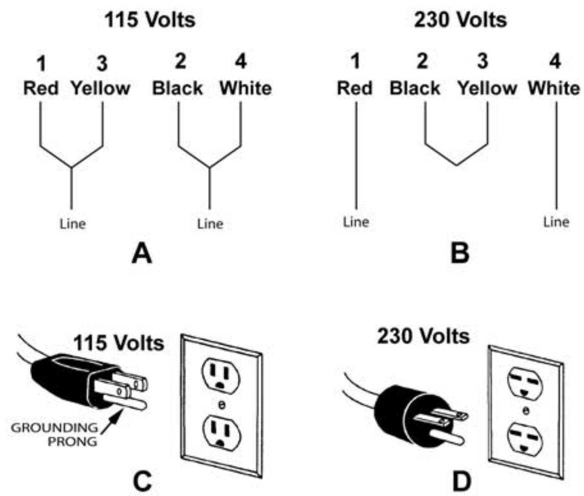


Figure 12

Permanently Connected Tools

Models J-A3816, J-A5816 and J-A5818 drill presses that are intended for permanent connection should be connected to a grounded metal permanent wiring system or to a system having an equipment-grounding conductor.

Grounding Instructions

CAUTION This tool must be grounded while in use to protect the operator from electric shock.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.

Repair or replace a damaged or worn cord immediately.

Extension Cords

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw. An undersized cord will cause a drop in the line voltage resulting in power loss and overheating. The table following shows the correct size to use depending on the cord length and name plate ampere rating. If in doubt, use the next heavier gauge. Remember, the smaller the gauge number, the heavier the cord.

Length of Cord	AWG
0–25	16
25-50	14
51-100	12

The drill press with a 230-volt plug should only be connected to an outlet having the same configuration (D, Fig. 12). No adapter is available or should be used with the 230-volt plug.

Important: In all cases (115 or 230 volts), make certain the receptacle in question is properly grounded. If you are not sure, have a registered electrician check the receptacle.

Troubleshooting

Problem	Probable Cause	Suggested Remedy
Spindle does not turn.	Circuit breaker tripped. Branch circuit breaker tripped or fuse blown. Open wire in switch circuit. Defective switch. Broken drive belt.	Reset circuit breaker. Reset branch circuit breaker/replace fuse. Repair open circuit. Repair switch. Replace drive belt.
Spindle noisy.	Damaged spindle bearings. Worn spline.	Replace bearings. Replace spline.
Drill stalls.	Worn drive belt. Excessive feed rate for size of drill and material being drilled. No cutting fluid or improper cutting fluid.	Check condition of belt. Replace if glazed or slipping on pulleys Reduce feed pressure or use cutting fluid Use correct cutting fluid.
Poorly drilled holes.	Drill dull Lack of rigidity in hold-down method. Speed too fast for material and drill size. Feed too fast for material and drill size. No or improper cutting fluid or coolant being used. Improperly ground drill bit.	Sharpen drill. Check that all T-slot hold-downs are tight and that table-lock and drill head bolts are tight. Check spindle speed recommendations. Reduce speed if necessary. Reduce feed rate. Use cutting fluid, or change to proper fluid or coolant for material being drilled. Check for proper angles and reliefs. Regrind to proper geometry.
Motor overheating	Electrical circuit fault. Oversize drill. Excessive feed. No cutting fluid, or wrong fluid	Check current draw in circuit. Make sure current draw is the same as rating on motor plate. Reduce drill size. Reduce feed rate. Use correct cutting fluid for the material and drill.
Table cannot be raised.	Lack of lubrication	Lubricate.
No speed readout.	Speed pickup out of adjustment or failed.	Adjust gap between speed pickup and post spindle pulley. If there is no readout on the speed indicator, replace the speed pickup.

Parts

Ordering Replacement Parts

To order parts or reach our service department, call 1-800-274-6848 Monday through Friday (see our website for business hours, www.jettools.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Parts List - Head Models J-A5816 and J-A5818

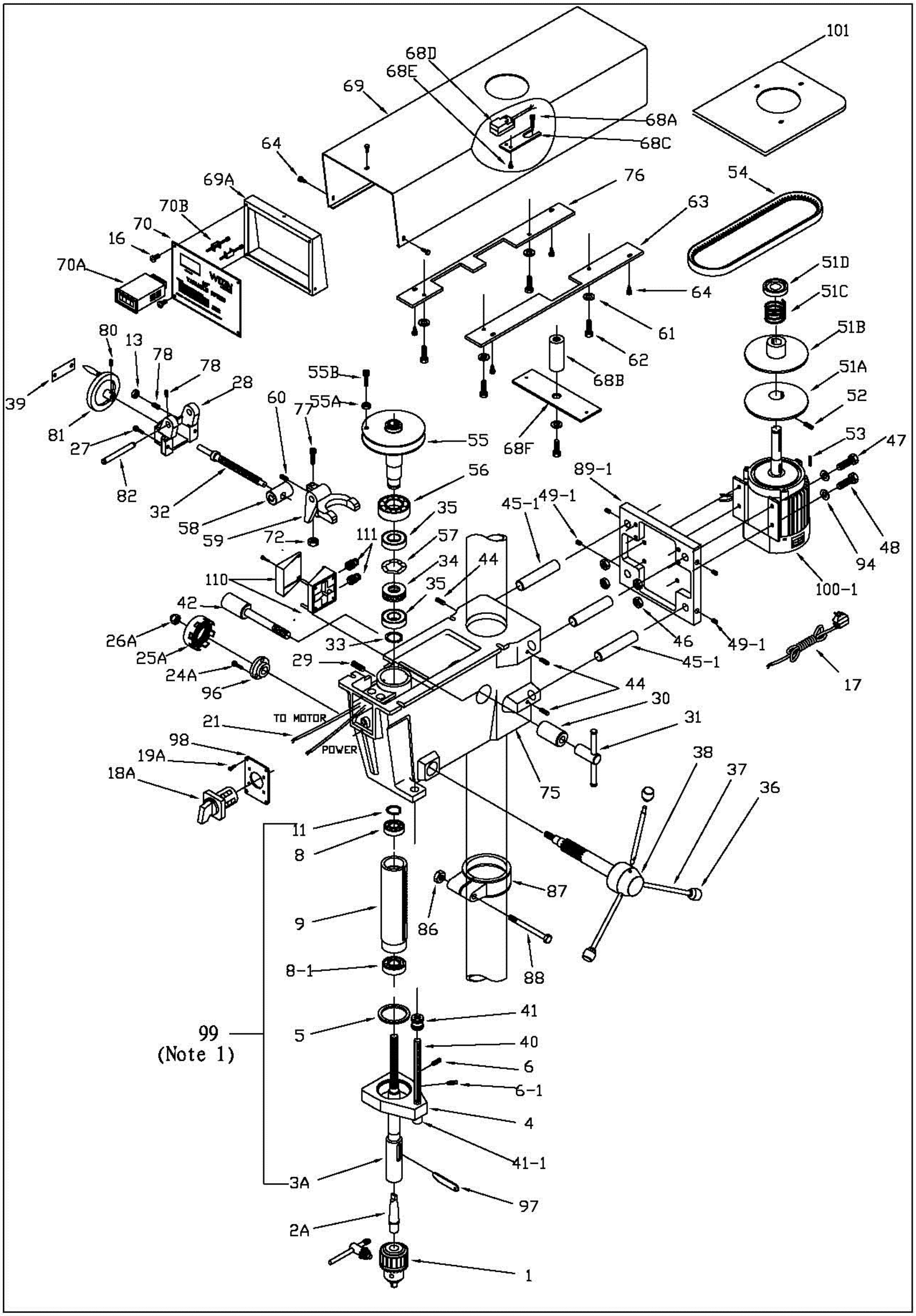
Item	Part No.	Description	Size	Qty.
1	5507580	Chuck (with Key)		1
2A	5507495	Arbor	#2 MT x JT3	1
3A	5507496A	Spindle		1
4	J-5053070	Quill Band		1
5	9010541	O-Ring		1
6	9054511	Set Screw	5/16-18 x 3/8	2
6-1	9054511A	Flat Head Screw	M6x16	1
7	5032611	Bearing Retainer		1
8	9100331	Bearing	6203ZZ	1
8-1	9100331A	Bearing	6204ZZ	1
9	5041010	Quill		1
10	9058561	Wavy Spring Washer		1
11	9074081	Truarc Retainer		1
13	9056981	Hex Jam Nut	1/4-20	3
16	5518170	Sloted self taping Screw	3/16-24 x 3/8	4
17	5518157	Power Cord (1-Phase)		1
17A	5517463	Power Cord (3-Phase)		1
18A	5507500	Switch (Single Phase)		1
	5507497	Switch (3-Phase)		1
19A	5507501	Slotted Machine Screw	1/4-20 x 1	4
21	5518158	Wiring Harness (1-Phase)		1
	5517457	Wiring Harness (3-Phase)		1
24A	5507502	Socket Head Cap Screw		3
25A	5507503	Return Spring Assemlby		1
26A	5507504	Nylon Nut		1
27	9135311	Lock Screw	1/4-20 x 1	2
28	J-5041050	Speed Change Housing		1
29	9127731	Socket Set Screw	5/16-18 x 5/16	1
30	5024541	Head Lock (Plain Side)		1
31	1000772	Lock Nut Assembly		1
32	5041071	Speed Change Shaft		1
33	9053661	Retainer		1
34	5041201	Bearing Spacer		1
35	9100321	Bearing		2
36	9070291	Knob		3
37	5053000	Spoke		3
38	J-5507827	Feed Shaft Assembly		1
39	5513378	Hi/Lo Speed Direction Plate		1
40	5053100A	Rod, Graduated		1
41	9056381	Jam Nut	5/8-11	3
41-1	9056381A	Nut M10xP1.5/Spring Washer M10		1
42	9128611	Hex Head Cap Screw	1/2-12 x 4	1
44	TS-0270031	Set Screw	5/16-18 x 3/8	4
45-1	5032781-1	Motor Plate Bar *(serial no: 11110696 and higher)*		4
46	9057111	Whiz Flange Locknut		4
47	TS-0152051	Carriage Bolt	5/16-18 x 2	2
48	9056171	Carriage Bolt	5/16-18 x 1-1/2	4
49-1	9058051-1	Set Screw *(serial no: 11110696 and higher)*	5 /16”	4
51A	A5816-51A	Lower Pulley		1
51B	A5816-51B	Upper Pulley		1
51C	A5816-51C	Spring		1
51D	A5816-51D	Spring Support Cover		1
52	9054621	Socket Set Screw	1/4-20 x 1/2	2
53	5042011	Key (Motor)		1
54	9077101	Variable Speed Belt		1

Parts List - Head Models J-A5816 and J-A5818

Item	Part No.	Description	Size	Qty.
55	5041140	Vaiable Speed Pulley (Spindle)		1
55A	5513510	Hex Nut		1
55B	5513511	SHCS		1
56	9100421	Bearing		1
57	9058571	Spring Washer		1
58	5041761	Speed Change Nut		1
59	5041040	Speed Change Lever		1
60	9127951	Socket Set Screw	1/4-20 x 1/2	1
61	9057461	Washer	1/4	3
62	9052101	Hex Head Cap Screw	1/4-20 x 1	4
63	J-5041271	Right Mounting Plate		1
64	5518170	Self Tapping Screw	3/16-24 x 3/8	7
68A	TS-0208041	SHCS	5/16-18x3/4	2
68B	5513513	Spacer, Threaded		1
68C	5513514	Plate, Bracket		1
68D	5513515	Pickup, Magnetic		1
68E	5513516	Screw		2
68F	5513521	Plate		1
69	J-5041320	Cover, Pulley		1
69A	J-5513517	Bracket, Face Plate		1
70	J-5513518	Plate, Face		1
70A	5513519	LED Display 1Ph		1
	5513736	LED Display 3 Ph		
70B	5513520	Screw, Locking		2
72	9056771	Hex Jam Nut	3/8-16	1
75	J-5041000	Head Casting		1
76	J-5518172	Left Mounting Plate		1
77	9052831	Socket Set Screw	3/8-16 x 1	1
78	TS-0267101	Socket Set Screw	1/4-20 x 1-1/4	2
80	9052971	Socket Set Screw	5/16-18 x 5/16	1
81	5034111	Hand Wheel		1
82	5513737	Shaft speed change lever		1
86	9129051	Hex Nut	7/16-14	1
87	5041470	Collar		1
88	9128071	Hex Head Cap Screw	7/16-14 x 3-1/2	1
89-1	J-5032560-1	Motor Mounting Bracket *(Serial no: 11110696 and higher)*		1
94	TS-0680032	Washer	5/16	8
96	5507505	Return Spring Bracket		1
97	5507507	Drift Pin		1
98	5507506	Switch Mounting Plate		1
99	5507527A	Quill Assembly (see Note)		1
100	J-A5816-100-1-1	Motor, 1 PH 115/220	1725 RPM 60 Hz	1
	A5816-100-2	Motor, 1PH 115/220	1725 RPM 50 Hz	1
	J-A5818-100-1	Motor, 3 PH 220/440	1725 RPM 50/60 Hz	1
101	A5816-01	Motor Plate		1
110	A5816-02	Connect Box		1
111	A5816-03	Strain Relief		1

Note: ....Quill assembly includes items 3A, 5, 8, 8-1, 9, and 11.

Exploded View — Head Models J-A5816 and J-A5818



Parts List - Head Model J-A3816

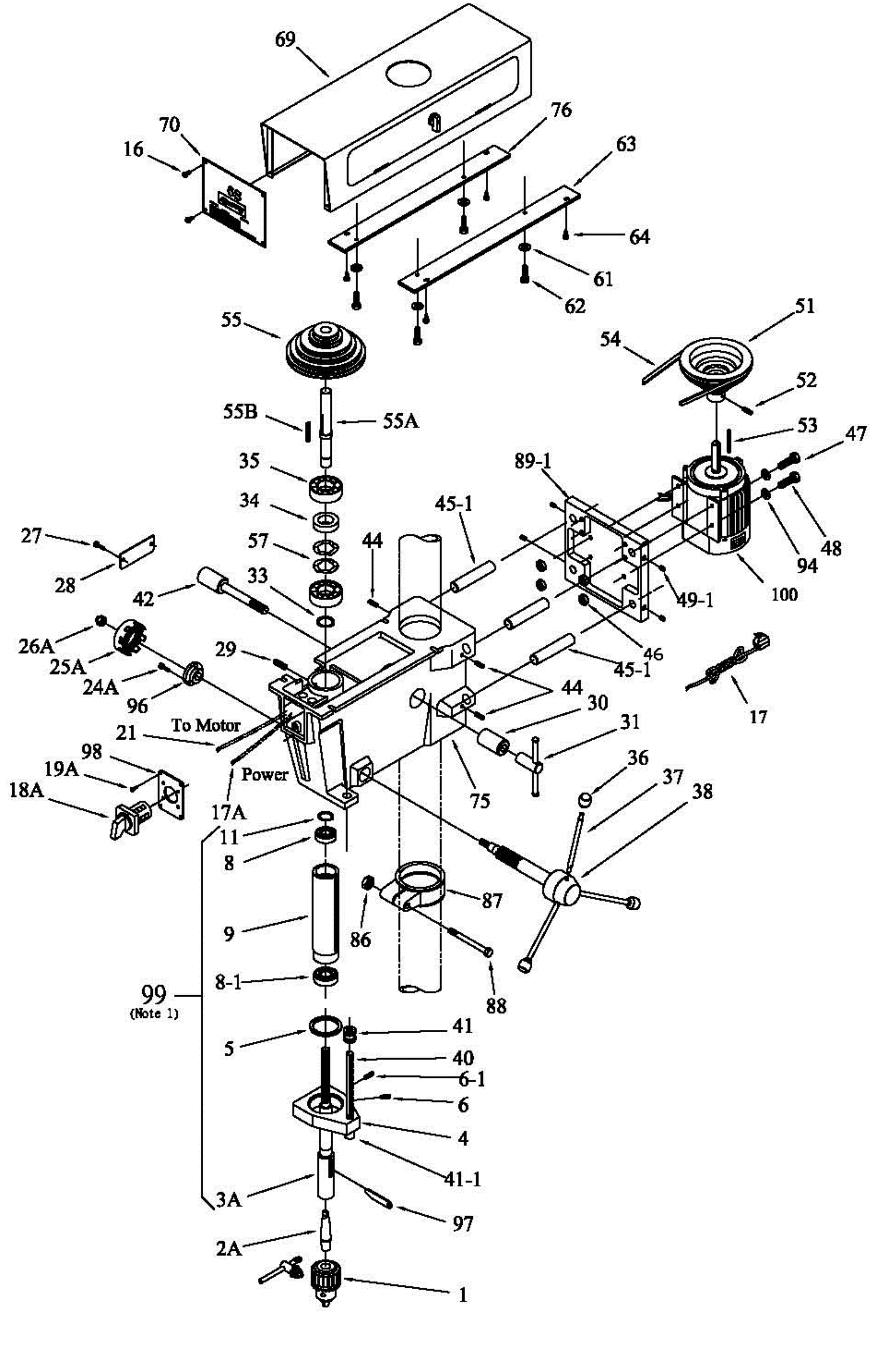
Item	Part No.	Description	Size	Qty.
1	5507580	Chuck (with Key)		1
2A	5507495	Arbor	#2 MT x JT3	1
3A	5507496A	Spindle Assembly		1
4	J-5053070	Quill Band		1
5	9010541	O-Ring		1
6	9054511	Set Screw	5/16-18 x 3/8	2
6-1	9054511A	Flat Head Screw	M6 x 16	1
7	5032611	Bearing Retainer		1
8	9100331	Bearing	6203ZZ	1
8-1	9100331A	Bearing	6204ZZ	1
9	5041010	Quill		1
10	9058561	Wavy Spring Washer		1
11	9074081	Truarc Retainer		1
13	9056981	Hex Jam Nut	1/4-20	3
16	9052711	Self Tapping Screw	8-32 x 3/8	4
17	5518157	Power Cord (Single Phase)		1
17A	5517463	Power Cord (3-Phase)		1
18A	5507500	Switch (Single Phase)		1
	5507497	Switch (3-Phase)		1
19A	5507501	Slotted Machine Screw		4
21	5518158	Wiring Harness (1-Phase)		1
	5517457	Wiring Harness (3-Phase)		1
24A	5507502	Socket Head Cap Screw		3
25A	5507503	Return Spring Assemlby		1
26A	5507504	Nylon Nut		1
27	5518159	Phillips Screw	1/4-20 x 5/16	2
28	5518160	Cover Plate		1
29	9127731	Socket Set Screw	5/16-18 x 5/16	1
30	5024541	Head Lock (Plain Side)		1
31	1000772	Lock Nut Assembly		1
33	9053661	Retainer		1
34	5041201	Bearing Spacer		1
35	9100321	Bearing		2
36	9070291	Knob		3
37	J-5053000	Spoke		3
38	J-5507827	Feed Shaft Assembly		1
40	5053100A	Rod, Graduated		1
41	9056381	Jam Nut	5/8-11	3
41-1	9056381A	Nut ….M10xP1.5/Spring Washer	M10	1
42	9128611	Hex Head Cap Screw	1/2-13 x 4	1
44	9052191	Socket Set Screw	5/16-18 x 1/2	4
45-1	5032781-1	Motor Plate Bar *(Serial no: 11110696 and higher)*		4
46	9057111	Whiz Flange Locknut		4
48	9056171	Carriage Bolt	5/16-18 x 1-1/2	4
49-1	9058051-1	Set Screw *(Serial no: 11110696 and higher)*	5/16”	4
51	5518161	Step Pulley (Motor)		1
52	5518162	Socket Set Screw	1/4-20 x 5/16	2
53	5042011	Key (Motor)		1
54	5518163	Drive Belt	OPTI VARIO 22x8x1140 or PYRA MID 1422V 470	1
55	5518164	Step Pulley (Spindle)		1
55A	5518165	Spindle Pulley Shaft		1
55B	5518166	Key	5 x 45	1
57	9058571	Spring Washer		2
61	9057461	Washer	1/4	3
62	9052101	Hex Head Cap Screw	1/4-20 x 1	4
63	J-5518167	Mounting Plate		1

Parts List - Head Model J-A3816

Item	Part No.	Description	Size	Qty.
64	9138011	Self Tapping Screw	#10 x 3/4 Type A	4
69	J-5518168	Pulley Cover (w/door & latch)		1
70	J-5518169	Face Plate		1
75	J-5041000	Head Casting		1
76	J-5518167L	Left Mounting Plate		1
86	9129051	Hex Nut	7/16-14	1
87	J-5041470	Collar		1
88	9128071	Hex Head Cap Screw	7/16-14 x 3-1/2	1
89-1	J-5032560-1	Motor Mounting Bracket *(Serial no: 11110696 and higher)*		1
94	9055281	Rubber Washer		4
96	5507505	Return Spring Bracket		1
97	5507507	Drift Pin		1
98	5507506	Switch Mounting Plate		1
99	5507527A	Quill Assembly (see Note)		1
100	J-5507812	Motor, 1 PH 115/220	1725 RPM 60 Hz	1
	J-5514604	Motor, 1PH 115/220	1725 RPM 50 Hz	1
	J-5507813	Motor, 3 PH 220/440	1725 RPM 50/60 Hz	1

Note: Quill assembly includes items 5, 7, 8, 8-1, 9, 10 and 11.

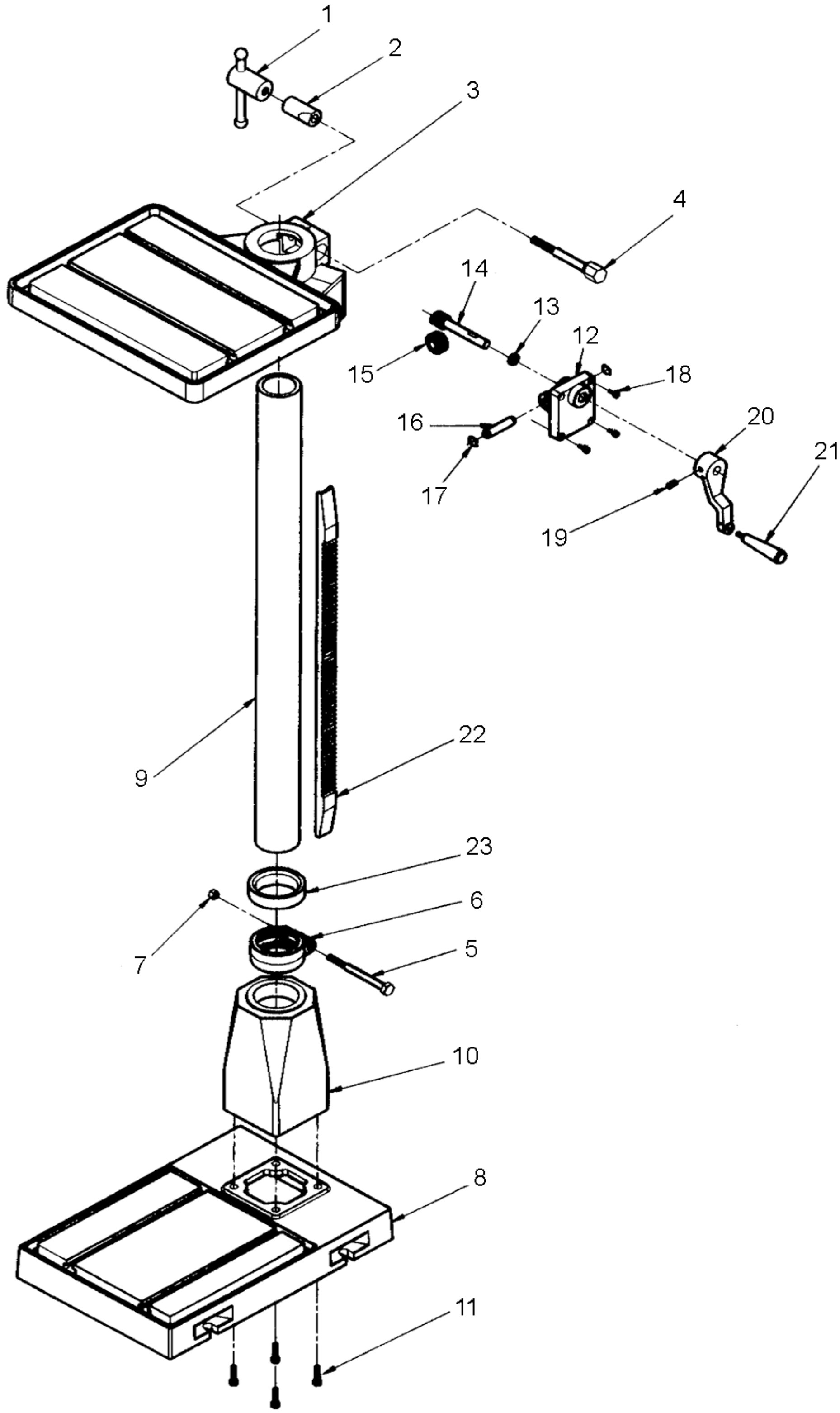
Exploded View — Head Model J-A3816



Parts List – Base Floor Models J-A3816, J-A5816 and J-A5818

Item	Part No.	Description	Size	Qty.
1	1000772	Locknut		1
2	5003751	Table Lock (Plain Side)		1
3	J-5507508	Table		1
4	5507509	Hex Head Cap Screw		1
5	TS-0061091	Cap Screw	7/16-14 x 3-1/2	1
6	J-5041470	Collar		1
7	9129051	Hex Nut	7/16-14	1
8	J-5507528	Base		1
9	5507510	Standard Column		1
	5511850	Short Column		1
10	J-5507511	Flange (Base/Column)		1
11	5630771	HHCS	1/2-12 x 1-1/2	4
12	J-5507571	Cover Plate		1
13	5507570	Bushing		1
14	5507513	Worm, Table Raiser		1
15	5507514	Gear, Table Raiser		1
16	5507515	Shaft, Table Raiser		1
17	5507516	C-Ring, Table Raiser		2
18	TS-0050051	SHCS	1/4 x 1	4
19	5507518	Socket Head Set Screw	5/16-18 x 3/8	1
20	J-5507519	Crank, Table Raiser		1
21	5507520	Handle, Table Raiser		1
22	5507521	Rack		1
23	J-5507522	Rack Ring		1
25	5507816	Table Raiser Assembly (includes index# 12 thru 17)		1

Exploded View – Base Floor Models J-A3816, J-A5816 and J-A5818



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